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A New Species of *Passandra* (Coleoptera, Passandridae) from Japan, Formerly Classified as *P. trigemina* (NEWMAN)

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Abstract Japanese specimens of *Passandra trigemina* (NEWMAN, 1839) were found to belong to a different species and is described as *Passandra okinawana* sp. nov. It is distinguishable from true *P. trigemina* mainly by the structure of antennae, the shape of pronotum and parameres.

Passandra of the family Passandridae is a rather small genus consisting of thirty species in the world (ŚLIPIŃSKI, 1987). Two species of *Passandra* have been known from Japan and one of them was identified by SASAJI (1985) as *Hectarthrum sociale* WATERHOUSE, 1876, which was regarded later by ŚLIPIŃSKI (1987) and BRUCKHARDT & ŚLIPIŃSKI (2003) as a junior synonym of *Passandra trigemina* (NEWMAN, 1839). I had a chance to collect many specimens of *Passandra* on the Ryukyu Islands in Southwest Japan and studied their morphology in detail in comparison with the original description of *Hectarthrum trigeminum* by NEWMAN (1839) and its redescription by ŚLIPIŃSKI (1987). As the result, I found some differences between them and came to the conclusion that the specimens from the Ryukyu Islands belong to a species different from true *P. trigemina.* It is described below as a new species.

Passandra okinawana AOKI, sp. nov.

(Figs. 1–6)

Body length 7.2–15.1 mm (average 11.5, n=13). Color uniformly black, rarely dark brown; surface shiny.

Head 0.8× as long as wide; medial process truncate anteriorly, smoothly narrowed posteriad, surface of anterior 2/5 shallowly depressed; lateral grooves deep and connected with transverse groove; basal transverse area smooth and weakly arched medially; surface micropunctured. Antennomere I barrel-shaped, II the shortest; apical part of IV–X more or less projecting inwards; ventral side of III–V with narrow groove, VI –X widely grooved; XI large, rounded apically; VI–X with a few barbs, XI densely barbed; dorsal side of antennomeres IV–X (Fig. 2) each with a small groove; lateral side of antennomeres III–X each with a small groove minutely barbed (Fig. 3).

Pronotum nearly parallel-sided, but slightly narrowed anteriorly and posteriorly;

anterior angles strongly prominent; posterior angles acute; lateral lines slightly concave in the middle part; sublateral lines obsolete at basal 1/3.5, not connected anteriorly, but well extending inwards, with a small transverse concavity in median part between median ends of the lines; marginal groove at base with a pair of notches. Surface very finely punctured.

Elytra parallel-sided, together rounded apically; each elytron with three long lines (I, V and VI); their length I>VI>V.

Median lobe of male genitalia rounded apically (Fig. 6); lateral side of paramere with 16–20 long and thick setae, of which basal four are sharply pointed at tip, but the remaining long setae rather blunt at tip and strongly curled apically (Fig. 5); median side of paramere with about forty short spines; some more small spines in basal part of paramere; a number of small pores scattered on whole surface.

Type series. Holotype ♂ (NSMT-I-C-200121) and 3 paratypes (NSMT): Tropical Botanical Garden in Hirara City, Miyakojima Island, Southwest Japan, 13-IV-2005, J. AOKI leg; 6 paratypes (NSMT): the same place, 19-X-2007, J. AOKI leg.; 4 paratypes (NSMT): Kita-Kamiyama Utaki, Kuroshima Island, Southwest Japan, 21-V-2005. J. AOKI leg.; 1 paratype (KUM): Miyakojima Island, Southwest Japan, 29-VI-1965, Y. HAYASHI leg.; 2 paratypes (KUM): Haterumajima Island, 27-VII-1964, T. ITO leg.; 5 paratypes (SEHU): Taketomijima Island, Southwest Japan, 19-III-1983, T. & T. NAKANE leg. Holotype and 13 paratypes are deposited in the collection of the National Museum of Nature and Science, Tokyo (NSMT), 3 paratypes in the collection of Kyushu University Museum (KUM) and 5 paratypes in the collection of Hokkaido University Museum (SEHU).

Distribution in Japan. Ryukyu Islands (Miyakojima Island, Kuroshima Island, Taketomijima Island and Haterumajima Island).

Remarks. Among the thirty species of *Passandra* of the world, *P. trigemina* (NEWMAN, 1839) is most similar to *P. okinawana* sp. nov., but the new species differs from *P. trigemina* in 1) only antennomeres VI–X widely grooved on ventral side (III–X widely grooved in *trigemina*), 2) the wider pronotum, 1.1–1.2×as long as wide (1.4×as long as wide in *trigemina*), 3) anterior end of sublateral line on pronotum turning inwards considerably (only for a short distance in *trigemina*), 4) a small transverse concavity found medially near the anterior margin of pronotum (no such a concavity in *trigemina*), 5) parameres provided with 16–20 long thick setae blunt at tips (about 13 long setae sharply pointed at tips in *trigemina*). The last two features are peculiar to the new species distinguishing it from all the other species of *Passandra*. My investigation of specimens of *Passandra* preserved in Kyushu University Museum and Hokkaido University Museum revealed that they are all identical with the new species described herein.

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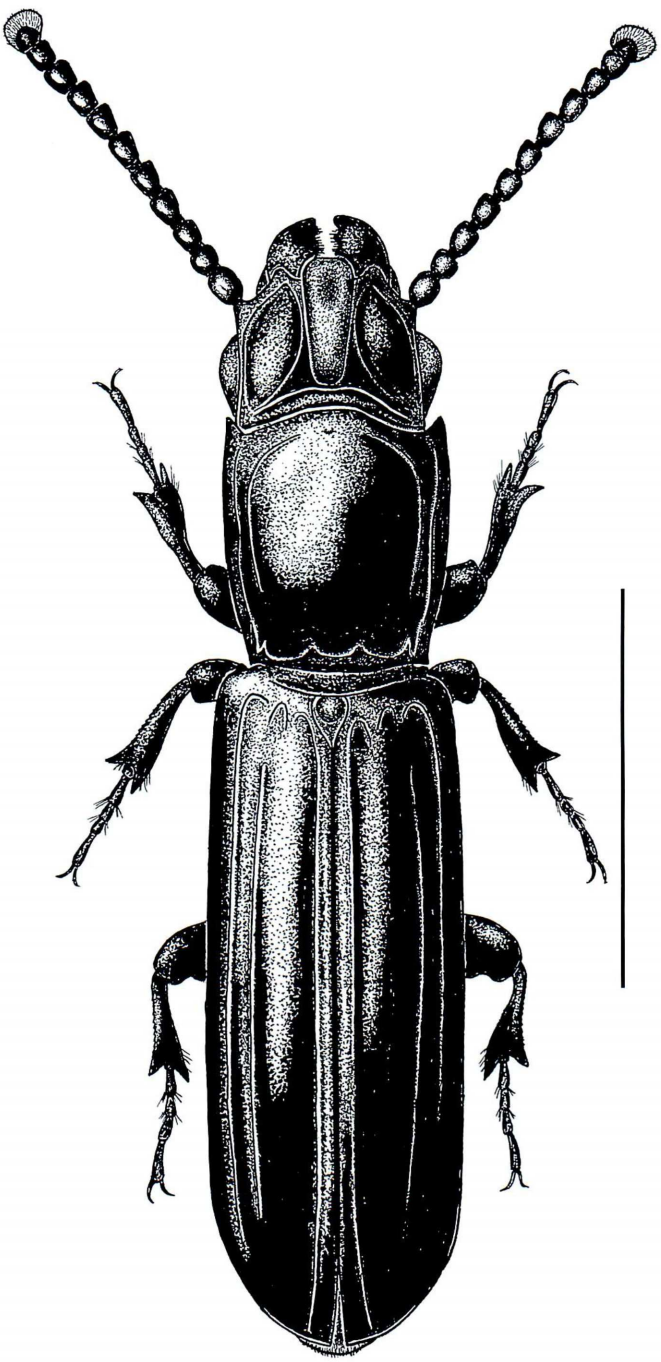
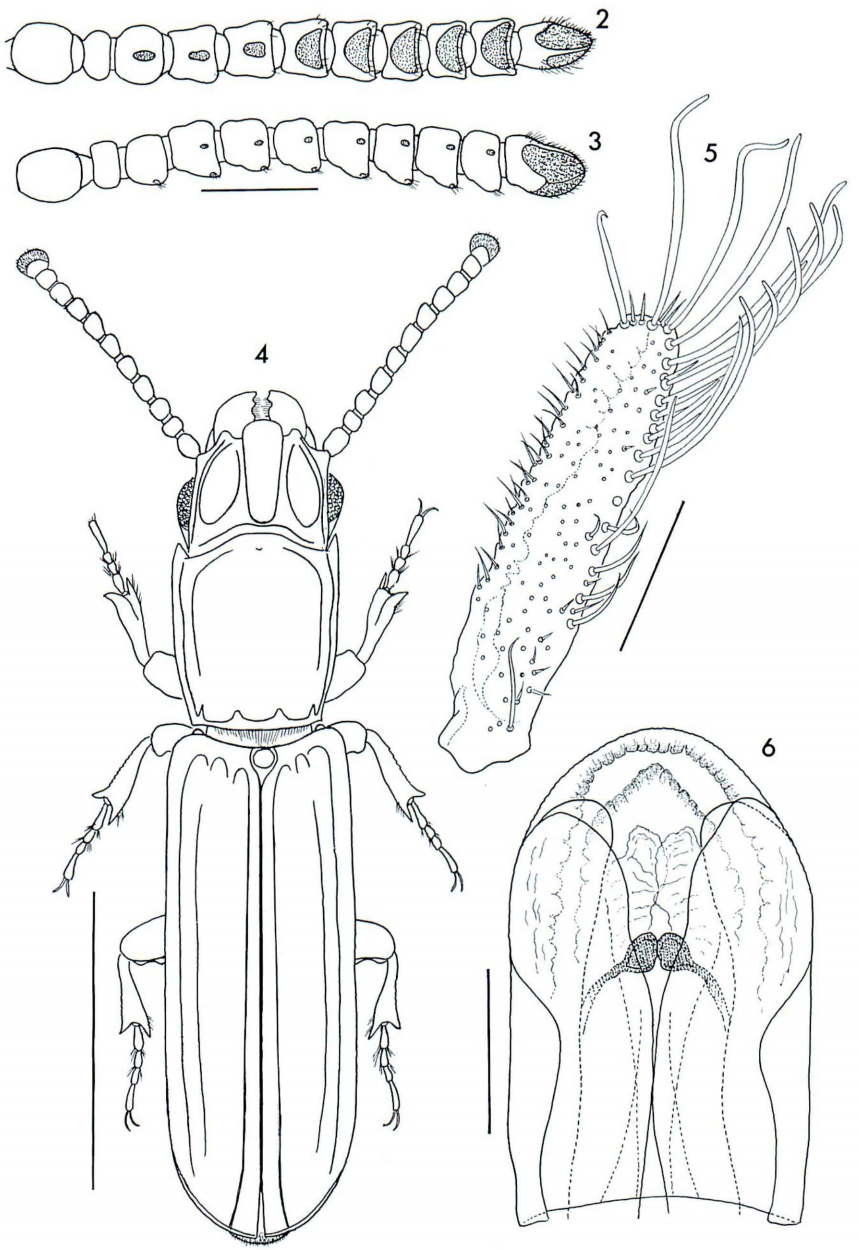


Fig. 1. *Passandra okinawana* sp. nov., ♂ (Scale: 5 mm).



Figs. 2–6. *Passandra okinawana* sp. nov., ♂. —— 2, Antenna in ventral aspect; 3, antenna in dorsal aspect; 4, dorsal side of whole body; 5, paramere, ventral; 6, median lobe, ventral (Scale: 1 mm for 2 and 3; 5 mm for 4; 0.2 mm for 5 and 6).

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要　約

青木淳一：クロツヤツツヒラタムシ（甲虫目，ツツヒラタムシ科）の学名の変更と新種としての記載．—— 日本産のツツヒラタムシ属 *Passandra* には 2 種が知られているが，そのうちの 1 種クロツヤツツヒラタムシには *Passandra trigemina* (NEWMAN, 1839) の学名が当てられている．今回，宮古島および黒島（沖縄県）で採集された本属のものを上記の種の原記載および再記載と比較検討したところ，これは *P. trigemina* とは別種の新種であると判断されたので，*Passandra okinawana* sp. nov. と命名記載した．和名は従来のクロツヤツツヒラタムシをそのまま使用する．新種は触角の構造，前胸背板の形・溝・凹み，陰茎側片毛の形などの違いによって，*P. trigemina* と区別される．なお，九州大学や北海道大学に保管されており，*P. trigemina* と同定されている宮古島，竹富島，波照間島産の標本を検討したところ，すべて本新種と同一種であることが確認されたので，真の *P. trigemina* は日本には分布しないものと判断される．

References

BURCKHARDT, D., & S. A. ŚLIPIŃSKI, 2003. Phylogeny and taxonomy of the world Passandridae (Coleoptera). *Mem. Entomol., Int., Gainesville*, **17**: 753–883.

NEWMAN, E., 1839. On the synonymy of *Passandra*, with description of all the old and of a few new species. *Ann. nat. Hist. London*, **2**: 388–399.

SASAJI, H., 1985. Passandridae. *In*: KUROSAWA, Y., S. HISAMATSU & H. SASAJI (eds.), *The Coleoptera of Japan in Color*, **3**: 198–199 [incl. pl. 32]. Hoikusha, Osaka.

ŚLIPIŃSKI, S. A., 1987. A review of the Passandridae of the world (Coleoptera, Cucujoidea). I — Genus *Passandra* DALMAN. *Annli. Mus. civ. Stor. nat. "Giacomo Doria", Genova*, **86**: 553–603.